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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,401	12/01/2000	Jin Soo Lee	HI-028	1358

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EXAMINER

MAHMOUDI, HASSAN

ART UNIT PAPER NUMBER

2165

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/726,401

Applicant(s)

LEE ET AL.

Examiner

Tony Mahmoudi

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-10, 13-15 and 17-26 is/are allowed.
- 6) ☐ Claim(s) 11 is/are rejected.
- 7) ☐ Claim(s) 12 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Remarks

1. In response to communications filed on 09-August-2004, the specification of the disclosure and claims 10-11, 13 and 26 are amended per applicant's request. Claims 1-26 are presently pending in the application.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 11-12, and 16 are rejected under 35 U.S.C. 101 because they include non-statutory subject matter.

The amended claim 11 recites "a method of updating weight of multimedia features
... using a learning rate of the weights among the multimedia features higher than a learning rate of the weights among elements of a multimedia feature", which presents an "abstract idea" which does not necessarily require technology. A claim must not be directed merely to an abstract idea, but must instead be tied to a technological art, environment, or machine which would result in a practical application producing a concrete, useful and tangible result.

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Claims 12 and 16 are rejected under 35 U.S.C. 101 because they are dependent from the rejected independent claim 11.

Allowable Subject Matter

4. Claims 1-10, 13-15 and 17-26 are allowed over the prior art made of record.

5. The following is a statement of reasons for allowance:

The applicants' amendments to independent claims 10 and 13, filed on 09-August-2004, overcomes the previous rejection of these claims under 35 U.S.C. § 101.

In addition, the applicants' arguments made in the amendments and remarks filed on 19-November-2003 have been fully considered and are found to be persuasive, in that the cited prior art do not disclose, teach, or suggest the claimed limitations of "reliability of the weight" and "updating the reliability of the present weight".

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

a method for updating multimedia feature information in a multimedia retrieval system using weight of multimedia features and reliability of the weight, comprising:

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(c) updating the reliability of the weight by reflecting the retrieval performance evaluation and the retrieval environment change, as claimed in claim 1.

Claims 3-9 and 17-22 are allowed over the prior art made of record because they are dependent from the allowed independent claim 1.

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

a method for updating multimedia feature information in a multimedia retrieval system using weight of multimedia features and reliability of the weight, comprising:

updating the reliability of the present weight by reflecting the calculated retrieval performance; and

updating the present weight using the updated reliability, as claimed in claim 2.

Claims 23-25 are allowed over the prior art made of record because they are dependent from the allowed independent claim 2.

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose,

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teach, or suggest the claimed limitations of (in combination with all other features in the claim):

updating a reliability of present weight by reflecting retrieval performance calculated using one or more user's feedbacks with respect to a multimedia retrieval result obtained using previous weight; and

updating a present weight using the updated reliability, as claimed in claim 10.

Claim 26 is allowed over the prior art made of record because it is dependent from the allowed independent claim 10.

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

a first routine to determine weight among multimedia features and weight among elements of the multimedia features; and

a second routine to determine weight-learning rate of the weights among the multimedia features that is higher than a weight-learning rate of the weights among elements of a multimedia feature, as claimed in claim 13.

Claims 14-15 are allowed over the prior art made of record because they are dependent from the allowed independent claim 13.

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6. Claims 12 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants are reminded of the rejection made under U.S.C. § 101 to independent claim 11 above (paragraphs 2 and 3.) Any decision regarding the allowance of claims 12 and 16 requires that the applicants overcome the rejection made under U.S.C. § 101 to independent claim 11 above.

7. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

wherein the weight is updated according to the following formula:

$$[\text{Reliability} \times \text{Old_W} + \text{Cur_W}] / [\text{Reliability} + 1]$$

wherein, $0 < a < 1$, and exponential term “a” in the formula for weights of feature is less than exponential term “a” in the formula for weights of elements of a feature, as claimed in claim 12.

The prior art of record, Wactlar et al (U.S. Patent No. 5,835,667), Vaithilingam et al (U.S. Patent No. 6,411,724), and Aggarwal et al (U.S. Patent No. 6,408,293), do not disclose,

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teach, or suggest the claimed limitations of (in combination with all other features in the claim):

wherein the weight is updated based on the following:

(b) the more times the previous feature weights are learned with the feedbacks from the user, the less the feature weights are influenced by new feedback; and

(c) the more recent the feedback is, the more the feedback influence to the feature weights update, as claimed in claim 16.

Response to Arguments

8. Applicant's arguments filed on 09-August-2004 with respect to the rejected claim has been fully considered but it is not deemed persuasive:

In view of the applicant's remarks regarding claim 11 that "the above amendments obviate the grounds for the rejection", the remarks have been noted, but the examiner maintains the rejection made to claims 11-12, and 16 under 35 U.S.C. 101 (paragraphs 2 and 3 of this Office Action.)

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (571) 272-4078. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (571) 272-4083.

tm

November 19, 2004


SAM RIMELL
PRIMARY EXAMINER